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RAW SEQUENCE LISTING
PATENT APPLICATION US/09/334,969

DATE: 11/26/1999
TIME: 15:46:49

Input Set: I334969.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

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1  <110> APPLICANT: JAKOBSEN, Bent Karsten
2      BOULTER, Jonathan Michael
3  <120> TITLE OF INVENTION: Multivalent T Cell Receptor Complexes
4  <130> FILE REFERENCE: 102286.410
5  <140> CURRENT APPLICATION NUMBER: US/09/334,969
6  <141> CURRENT FILING DATE: 1999-06-17
7  <150> EARLIER APPLICATION NUMBER: PCT/GB99 01583
8  <151> EARLIER FILING DATE: 1999-05-19
9  <150> EARLIER APPLICATION NUMBER: GB 9810759.2
10 <151> EARLIER FILING DATE: 1998-05-19
11 <150> EARLIER APPLICATION NUMBER: GB 9821129.5
12 <151> EARLIER FILING DATE: 1998-09-29
13 <160> NUMBER OF SEQ ID NOS: 85
14 <170> SOFTWARE: PatentIn Ver. 2.1
15 <210> SEQ ID NO 1
16 <211> LENGTH: 744
17 <212> TYPE: DNA
18 <213> ORGANISM: Artificial Sequence
19 <220> FEATURE:
20 <223> OTHER INFORMATION: Description of Artificial Sequence: Gene coding
21     for human HLA-A2/flu matrix peptide restricted
22     JM22 TCR alpha chain fused to c-jun leucine zipper
23     domain.
24 <400> SEQUENCE: 1
25     atgcaactac tagaacaag tctcagttt ctaagcatcc aagagggaga aaatctcact 60
26     gtgtactgca actcctcaag tgttttttcc agcttacaat ggtacagaca ggagcctggg 120
27     gaaggtcctg tctcctcgtt gacagtagtt acgggtggag aagtgaagaa gctgaagaga 180
28     ctaacctttc agtttggtga tgcaagaaag gacagttctc tccacatcac tgcggcccag 240
29     cctggtgata caggcctcta cctctgtgca ggagcgggaa gccaaaggaa tctcatcttt 300
30     ggaaaaggca ctaaactctc tgttaaacca aatatccaga accctgaccc tgccgtgtac 360
31     cagctgagag actctaaatc cagtgaacaag tctgtctgcc tattcaccga ttttgattct 420
32     caaacaatg tgtcacaaag taaggattct gatgtgtata tcacagacaa aactgtgcta 480
33     gacatgaggt ctatggactt caagagcaac agtgctgtgg cctggagcaa caaatctgac 540
34     tttgcatgtg caaacgcctt caacaacagc attattccag aagacacctt cttccccagc 600
35     ccagaaagtt ccccgggggg tagaatcgcc cggtcggagg aaaaagtga aaccttgaaa 660
36     gctcagaact cggagctggc gtccacggcc aacatgctca gggaacaggt ggcacagctt 720
37     aaacagaaag tcatgaacta ctacgtgtag 744
38 <210> SEQ ID NO 2
39 <211> LENGTH: 247
40 <212> TYPE: PRT
41 <213> ORGANISM: Artificial Sequence
42 <220> FEATURE:
43 <223> OTHER INFORMATION: Description of Artificial Sequence: Amino acid
44     sequence of human HLA-A2/flu matrix peptide

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45 restricted JM22 TCR alpha chain fused to c-jun
46 leucine zipper domain.
47 <400> SEQUENCE: 2
48 Met Gln Leu Leu Glu Gln Ser Pro Gln Phe Leu Ser Ile Gln Glu Gly
49 1 5 10 15
50 Glu Asn Leu Thr Val Tyr Cys Asn Ser Ser Val Phe Ser Ser Leu
51 20 25 30
52 Gln Trp Tyr Arg Gln Glu Pro Gly Glu Gly Pro Val Leu Leu Val Thr
53 35 40 45
54 Val Val Thr Gly Gly Glu Val Lys Lys Leu Lys Arg Leu Thr Phe Gln
55 50 55 60
56 Phe Gly Asp Ala Arg Lys Asp Ser Ser Leu His Ile Thr Ala Ala Gln
57 65 70 75 80
58 Pro Gly Asp Thr Gly Leu Tyr Leu Cys Ala Gly Ala Gly Ser Gln Gly
59 85 90 95
60 Asn Leu Ile Phe Gly Lys Gly Thr Lys Leu Ser Val Lys Pro Asn Ile
61 100 105 110
62 Gln Asn Pro Asp Pro Ala Val Tyr Gln Leu Arg Asp Ser Lys Ser Ser
63 115 120 125
64 Asp Lys Ser Val Cys Leu Phe Thr Asp Phe Asp Ser Gln Thr Asn Val
65 130 135 140
66 Ser Gln Ser Lys Asp Ser Asp Val Tyr Ile Thr Asp Lys Thr Val Leu
67 145 150 155 160
68 Asp Met Arg Ser Met Asp Phe Lys Ser Asn Ser Ala Val Ala Trp Ser
69 165 170 175
70 Asn Lys Ser Asp Phe Ala Cys Ala Asn Ala Phe Asn Asn Ser Ile Ile
71 180 185 190
72 Pro Glu Asp Thr Phe Phe Pro Ser Pro Glu Ser Ser Pro Gly Gly Arg
73 195 200 205
74 Ile Ala Arg Leu Glu Glu Lys Val Lys Thr Leu Lys Ala Gln Asn Ser
75 210 215 220
76 Glu Leu Ala Ser Thr Ala Asn Met Leu Arg Glu Gln Val Ala Gln Leu
77 225 230 235 240
78 Lys Gln Lys Val Met Asn Tyr
79 245

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80 <210> SEQ ID NO 3
81 <211> LENGTH: 864
82 <212> TYPE: DNA
83 <213> ORGANISM: Artificial Sequence
84 <220> FEATURE:
85 <223> OTHER INFORMATION: Description of Artificial Sequence: Gene coding
86 for human HLA-A2/flu matrix peptide restricted
87 JM22 TCR beta chain fused to c-fos leucine zipper
88 domain.

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89 <400> SEQUENCE: 3
90 atggtggatg gtggaatcac tcagtcccca aagtacctgt tcagaaagga aggacagaat 60
91 gtgaccctga gttgtgaaca gaatttgaac cacgatgccca tgtactggta ccgacaggac 120
92 ccagggcaag ggctgagatt gatctactac tcacagatag taaatgactt tcagaaagga 180
93 gatatagctg aagggtacag cgtctctcgg gagaagaagg aatcctttcc tctcactgtg 240
94 acatcgcccc aaaagaacct gacagctttc tatctctgtg ccagtagttc gaggagctcc 300

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95   tacgagcagt acttcgggcc gggcaccagg ctcacggtca cagaggacct gaaaaacggt 360
96   ttcccccccg aggtcgctgt gtttgaacca tcagaagcag agatctccca caccctaaaag 420
97   gccacactgg tgtgcctggc cacaggcttc taccctgacc acgtggagct gagctggtgg 480
98   gtgaatggga aggaggtgca cagtggggtc agcacagacc cgcagcccct caaggagcag 540
99   cccgccctca atgactccag atactgcctg agcagccgcc tgagggtctc ggccaccttc 600
100  tggcagaacc cccgcaacca cttccgctgt caagtccagt tctacgggct ctcggagaat 660
101  gacgagtgga cccaggatag ggccaaacct gtcaccaga tcgtcagcgc cgaggcctgg 720
102  ggtagagcag accccggggg tctgactgat aactccaag cggagacaga tcaacttgaa 780
103  gacaagaagt ctgcgttgca gaccgagatt gccaatctac tgaaagagaa ggaaaaacta 840
104  gagttcatcc tggcagctta ctag                                     864

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105 <210> SEQ ID NO 4

106 <211> LENGTH: 287

107 <212> TYPE: PRT

108 <213> ORGANISM: Artificial Sequence

109 <220> FEATURE:

110 <223> OTHER INFORMATION: Description of Artificial Sequence: Amino acid
 111 sequence of human HLA-A2/flu matrix peptide
 112 restricted JM22 TCR beta chain fused to c-fos
 113 leucine zipper domain.

114 <400> SEQUENCE: 4

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115   Met Val Asp Gly Gly Ile Thr Gln Ser Pro Lys Tyr Leu Phe Arg Lys
116       1             5             10             15
117   Glu Gly Gln Asn Val Thr Leu Ser Cys Glu Gln Asn Leu Asn His Asp
118           20             25             30
119   Ala Met Tyr Trp Tyr Arg Gln Asp Pro Gly Gln Gly Leu Arg Leu Ile
120           35             40             45
121   Tyr Tyr Ser Gln Ile Val Asn Asp Phe Gln Lys Gly Asp Ile Ala Glu
122           50             55             60
123   Gly Tyr Ser Val Ser Arg Glu Lys Lys Glu Ser Phe Pro Leu Thr Val
124           65             70             75             80
125   Thr Ser Ala Gln Lys Asn Pro Thr Ala Phe Tyr Leu Cys Ala Ser Ser
126           85             90             95
127   Ser Arg Ser Ser Tyr Glu Gln Tyr Phe Gly Pro Gly Thr Arg Leu Thr
128           100            105            110
129   Val Thr Glu Asp Leu Lys Asn Val Phe Pro Pro Glu Val Ala Val Phe
130           115            120            125
131   Glu Pro Ser Glu Ala Glu Ile Ser His Thr Gln Lys Ala Thr Leu Val
132           130            135            140
133   Cys Leu Ala Thr Gly Phe Tyr Pro Asp His Val Glu Leu Ser Trp Trp
134           145            150            155            160
135   Val Asn Gly Lys Glu Val His Ser Gly Val Ser Thr Asp Pro Gln Pro
136           165            170            175
137   Leu Lys Glu Gln Pro Ala Leu Asn Asp Ser Arg Tyr Cys Leu Ser Ser
138           180            185            190
139   Arg Leu Arg Val Ser Ala Thr Phe Trp Gln Asn Pro Arg Asn His Phe
140           195            200            205
141   Arg Cys Gln Val Gln Phe Tyr Gly Leu Ser Glu Asn Asp Glu Trp Thr
142           210            215            220
143   Gln Asp Arg Ala Lys Pro Val Thr Gln Ile Val Ser Ala Glu Ala Trp
144           225            230            235            240

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145      Gly Arg Ala Asp Pro Gly Gly Leu Thr Asp Thr Leu Gln Ala Glu Thr
146                245                250                255
147      Asp Gln Leu Glu Asp Lys Lys Ser Ala Leu Gln Thr Glu Ile Ala Asn
148                260                265                270
149      Leu Leu Lys Glu Lys Glu Lys Leu Glu Phe Ile Leu Ala Ala Tyr
150                275                280                285
151 <210> SEQ ID NO 5
152 <211> LENGTH: 918
153 <212> TYPE: DNA
154 <213> ORGANISM: Artificial Sequence
155 <220> FEATURE:
156 <223> OTHER INFORMATION: Description of Artificial Sequence: Gene coding
157      for human HLA-A2/flu matrix peptide restricted
158      JM22 TCR beta chain fused to c-fos leucine zipper
159      domain and BirA biotinylation tag.
160 <400> SEQUENCE: 5
161      atggtggatg gtggaatcac tcagtcacca aagtacctgt tcagaaagga aggacagaat 60
162      gtgacctga gttgtgaaca gaatttgaac cacgatgcca tgtactggta cgcacaggac 120
163      ccagggcaag ggctgagatt gatctactac tcacagatag taaatgactt tcagaaagga 180
164      gatatactg aagggtagag cgtctctcgg gagaagaagg aatcctttcc tctcactgtg 240
165      acatcggccc aaaagaaccc gacagctttc tatctctgtg ccagtagttc gaggagctcc 300
166      tacgagcagt acttcggggc gggcaccagg ctcacgggtc cagaggacct gaaaaacgtt 360
167      ttcccaccg aggtcgctgt gtttgaacca tcagaagcag agatctccca caccctaaag 420
168      gccacactgg tgtgcctggc cacaggcttc taccgcgacc acgtggagct gagctgggtg 480
169      gtgaatggga aggaggtgca cagtggggtc agcacagacc cgcagccctt caaggagcag 540
170      cccgccttca atgactccag atactgcctg agcagccgcc tgagggtctc ggccaccttc 600
171      tggcagaacc cccgcaacca ctccgctgt caagtccagt tctacgggct ctcgagagaat 660
172      gacgagtgga cccaggatag ggccaaacct gtcaccaga tcgtcagcgc cgaggcctgg 720
173      ggtagagcag accccggggg tctgactgat acactccaag cggagacaga tcaacttgaa 780
174      gacaagaagt ctgcgttgca gaccgagatt gccaatctac tgaaagagaa ggaaaaacta 840
175      gagttcatcc tggcagctta cggatccggg ggtggtctga acgatatttt tgaagctcag 900
176      aaaatcgaat ggcattaa                                918
177 <210> SEQ ID NO 6
178 <211> LENGTH: 305
179 <212> TYPE: PRT
180 <213> ORGANISM: Artificial Sequence
181 <220> FEATURE:
182 <223> OTHER INFORMATION: Description of Artificial Sequence: Amino acid
183      sequence of human HLA-A2/flu matrix peptide
184      restricted JM22 TCR beta chain fused to c-fos
185      leucine zipper domain and BirA biotinylation tag.
186 <400> SEQUENCE: 6
187      Met Val Asp Gly Gly Ile Thr Gln Ser Pro Lys Tyr Leu Phe Arg Lys
188      1                5                10                15
189      Glu Gly Gln Asn Val Thr Leu Ser Cys Glu Gln Asn Leu Asn His Asp
190                20                25                30
191      Ala Met Tyr Trp Tyr Arg Gln Asp Pro Gly Gln Gly Leu Arg Leu Ile
192                35                40                45
193      Tyr Tyr Ser Gln Ile Val Asn Asp Phe Gln Lys Gly Asp Ile Ala Glu
194                50                55                60

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195   Gly Tyr Ser Val Ser Arg Glu Lys Lys Glu Ser Phe Pro Leu Thr Val
196       65              70              75              80
197   Thr Ser Ala Gln Lys Asn Pro Thr Ala Phe Tyr Leu Cys Ala Ser Ser
198               85              90              95
199   Ser Arg Ser Ser Tyr Glu Gln Tyr Phe Gly Pro Gly Thr Arg Leu Thr
200               100             105             110
201   Val Thr Glu Asp Leu Lys Asn Val Phe Pro Pro Glu Val Ala Val Phe
202               115             120             125
203   Glu Pro Ser Glu Ala Glu Ile Ser His Thr Gln Lys Ala Thr Leu Val
204               130             135             140
205   Cys Leu Ala Thr Gly Phe Tyr Pro Asp His Val Glu Leu Ser Trp Trp
206               145             150             155             160
207   Val Asn Gly Lys Glu Val His Ser Gly Val Ser Thr Asp Pro Gln Pro
208               165             170             175
209   Leu Lys Glu Gln Pro Ala Leu Asn Asp Ser Arg Tyr Cys Leu Ser Ser
210               180             185             190
211   Arg Leu Arg Val Ser Ala Thr Phe Trp Gln Asn Pro Arg Asn His Phe
212               195             200             205
213   Arg Cys Gln Val Gln Phe Tyr Gly Leu Ser Glu Asn Asp Glu Trp Thr
214               210             215             220
215   Gln Asp Arg Ala Lys Pro Val Thr Gln Ile Val Ser Ala Glu Ala Trp
216               225             230             235             240
217   Gly Arg Ala Asp Pro Gly Gly Leu Thr Asp Thr Leu Gln Ala Glu Thr
218               245             250             255
219   Asp Gln Leu Glu Asp Lys Lys Ser Ala Leu Gln Thr Glu Ile Ala Asn
220               260             265             270
221   Leu Leu Lys Glu Lys Glu Lys Leu Glu Phe Ile Leu Ala Ala Tyr Gly
222               275             280             285
223   Ser Gly Gly Gly Leu Asn Asp Ile Phe Glu Ala Gln Lys Ile Glu Trp
224               290             295             300
225   His
226   305
227 <210> SEQ ID NO 7
228 <211> LENGTH: 750
229 <212> TYPE: DNA
230 <213> ORGANISM: Artificial Sequence
231 <220> FEATURE:
232 <223> OTHER INFORMATION: Description of Artificial Sequence: Gene coding
233   for human HLA-A2/HTLV-1 Tax peptide restricted TCR
234   alpha chain from clone A6 fused to c-jun leucine
235   zipper domain.
236 <400> SEQUENCE: 7
237   atgcagaagg aagtggagca gaactctgga cccctcagtg ttccagaggg agccattgcc 60
238   tctctcaact gcacttacag tgaccgaggt tcccagtcct tcttctggta cagacaatat 120
239   tctgggaaaa gccctgagtt gataatgtcc atatactcca atggtgacaa agaagatgga 180
240   aggtttacag cacagctcaa taaagccagc cagtatgttt ctctgctcat cagagactcc 240
241   cagcccagtg attcagccac ctacctctgt gccgttacaa ctgacagctg ggggaaattg 300
242   cagtttgagg cagggaccca ggttggtggtc accccagata tccagaaccc tgaccctgcc 360
243   gtgtaccagc tgagagactc taaatccagt gacaagtctg tctgcctatt caccgatttt 420
244   gattctcaaa caaatgtgtc acaaagtaag gattctgatg tgtatatcac agacaaaact 480

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